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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,354	11/09/2000	Uri Polat	251/255	6811
7590	10/02/2003		EXAMINER	
Neuro vision, Inc. P.O. Box 1888 Ramat Gan, 52136 ISRAEL			PATEL, SHEFALI D	
			ART UNIT	PAPER NUMBER
			2621	
			DATE MAILED: 10/02/2003	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/711,354	POLAT ET AL.
	Examiner	Art Unit
	Shefali D Patel	2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 09 November 2000 .

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-39 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09 November 2000 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2-3 . 6) Other: _____ .

DETAILED ACTION

1. This application is a CIP of 09/642,505 filed on 08/18/2000.

Priority

1. This application appears to be a division of Application No. 09/642,506, filed 08/18/2000. A later application for a distinct or independent invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in an earlier or parent application is known as a divisional application or “division.” The divisional application should set forth only that portion of the earlier disclosure which is germane to the invention as claimed in the divisional application.
2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Israel on December 27, 1999. It is noted, however, that applicant has not filed a certified copy of the 133758 application as required by 35 U.S.C. 119(b) in the parent case 09/642,506.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a host storage device comprising a computer-readable medium coupled to the host server” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. NOTE: claim 1 line 7-9 claims that “a host storage device comprising a computer-readable medium communicatively coupled to the host server having stored...” is not clearly shown in Fig. 6. Host server 602 comprises host data storage device 606, however they both are not shown as “coupled” and host data storage device 606 does not show comprising a computer-readable medium.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because Figured 5-7 and 8 does not meet the requirement of acceptable size of the margins. See 37 CFR 1.84(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 10-13, 15-18, and 37-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 3 recites the limitation "the Internet" in line 2 of claim 3. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 10-13, 15-18, and 37-38 recites the limitation "the step of" in line 1 of claims 10-13, 15-18, and 37-38. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests that "the step of" should maybe "the act of."

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Pellicano (USPN 6,386,707 B1).

With regard to **claim 1** Pellicano discloses a system for identifying visual and neurological abilities for improving visual and neurological performance (Figures 1(a), 1(b)), or for both, the system comprising: a client terminal (client terminal 10, Fig. 1(a)); a host server (server 30, Fig. 1(a)) communicatively coupled to the client terminal (client terminal 10 and host server 30 is coupled by a network communication 20 seen Fig. 1(a). See, col. 2 lines 65-67) and a host storage device comprising a computer-readable medium communicatively coupled to the host server (storage device is conventional for a server and a computer. Pellicano teaches of uploading information of a subject from the server 30 to the client terminal 10 via Internet 20. In order for a server 30 to provide information to the terminal 10, server 30 needs to have a storage device for storing the information.) having stored therein one or more sequences or processor executable instructions (executable instructions (from a processor) are being executed by the server when a client has made a request. See, col. 3 lines 13-16 and 25-29) for identifying visual and neurological abilities, for improving visual and neurological performance, or for both (the system of Pellicano discloses a variety of vision acuity tests for identifying visual abilities. See, col. 4 lines 4-8, 15-20, and 31-36).

With regard to **claim 2** Pellicano discloses the client terminal (terminal 10, Fig. 1(a)) and the host server (server 30, Fig. 1(a)) are communicatively coupled via a communications network (network 20, Fig. 1(a)).

With regard to **claim 3** Pellicano discloses the communications network comprising the Internet (internet 20, Fig. 1(a)).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellicano in view of Van Hoff (USPN 5,802,530).

With regard to **claim 4** Pellicano discloses a terminal and a host server connected by a communication network (an internet) as disclosed in claim 1 above. Pellicano discloses one or more sequence of processor executable instructions for displaying one or more images on the display device that aid in identifying visual and neurological abilities, aid in improving visual and neurological performance, or both, the instructions located on the client storage device (as described above in claim 1). However Pellicano does not expressly disclose any detail of the client terminal. Van Hoff discloses the client terminal in detail as illustrated in Figure 1. Van Hoff discloses a client terminal (client computer 102, Fig. 1) comprising: a processor (CPU 126); a client storage device (secondary memory 133); a persistent memory (primary memory); a display device (display 130); an input device (input device keyboard 129 or a mouse 128); and a communication interface (network interface 132 for client computer) communicatively coupled to the processor (132 is coupled to the processor 126), the interface configured to transmit data to

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and from the host server via the communication network (the communication network 106 transmitting data to and from 102 and 104). NOTE: a client storage device, a memory, a display device, and an input device are all clearly seen to be coupled to the processor 126 as seen in Fig.

1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Van Hoff with Pellicano. The motivation for doing so is that having a processor, storage device, memory, display, input device is conventional and very well known in the art. Therefore, it would have been obvious to combine Van Hoff with Pellicano to obtain the invention as specified in claim 4.

With regard to **claim 5** Van Hoff discloses a host server (server computer 104, Fig. 1) comprising: a processor (CPU 110); a persistent memory communicatively coupled to the processor (memory 118 coupled to CPU 110); and a communication interface (network interface 116 for server computer) communicatively coupled to the processor (116 is coupled to the processor 110), the interface configured to transmit data to and from the host server via the communication network (the communication network 106 transmitting data to and from 102 and 104).

With regard to **claim 6** Van Hoff discloses a host server (server 104, Fig. 1) comprising a user database (database 120, 150 and 122 within the memory 118) communicatively coupled to the processor for storing user information (coupled to the CPU 110 for storage in the memory 118).

With regard to **claim 7** Pellicano discloses one or more sequences of processor executable instructions stored in the host storage device causing the processor to perform a number of acts (as described above in claim 1) said acts comprising: selecting parameters and delivering them to the client terminal (parameters of orientation, size and color are delivered to

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the client terminal for testing. See, col. 4 lines 14-20 and 32-36); receiving a set of user inputs from the client terminal (user puts in the input by use of a mouse, keyboard or a audio means, see col. 4 lines 37-39); analyzing the set of user inputs (analyzing upon receiving the input, see col. 4 lines 39-45); and generating one or more further parameters to deliver to the client terminal based at least in part upon the analysis performed on the set of user inputs (the server continues to have a further testing upon the input from a user if the test was not complete. See, col. 4 lines 20-29 where the proper selection is being evaluated if there was an error in the input from the user and parameter (i.e., color) is being generated as discussed at col. 4 lines 29-31. See also, col. 4 lines 49-56).

With regard to **claim 8** Pellicano discloses authenticating a user (account number is used when logging in to the terminal and it is being validated via Internet for authenticating a user. See, col. 3 lines 23-30).

11. Claims 9-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellicano in view of Van Hoff (USPN 5,802,530) as applied to claims 4-8 above, and further in view of Sinclair et al. (hereinafter, "Sinclair") (USPN 5,589,897).

With regard to **claim 9** Pellicano discloses one or more sequence of processor executable instructions stored in the client storage device causes the processor to perform a number of acts (as described above in claim 1). However Pellicano does not expressly disclose generating an image; receiving an input from a user based on the user's perception of the image; and generating a further image based on the input. Sinclair discloses a system and a method, comprising: generating an image (column 5 lines 47-51, the input program generates the series of

images including the target as shown in Fig. 1); receiving an input from a user based on the user's perception of the image (column 5 lines 66-67 to column 6 lines 1-3); generating a further image based on the person's inputs (column 6 lines 3-7). As to "generating a further image" based on the input as called for in claim 9, this limitation corresponds to the progressively larger or smaller images generated according to the techniques in Sinclair at column 6 lines 5-17. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Van Hoff and Pellicano with Sinclair. The motivation for doing so is that generating an image, receiving an input from a user based on the user's perception of the image and generating a further image based on the input is all of a necessary steps required in the Pellicano's invention. Note, Pellicano (as described above) discloses a variety of vision acuity tests for identifying visual abilities at col. 4 lines 4-67. Pellicano simply goes thru the process without disclosing generating an image but it is obvious that Pellicano is generating an image (by providing an image to the client terminal, see claim 7 above). Therefore, it would have been obvious to combine Van Hoff and Pellicano with Sinclair to obtain the invention as specified in claim 9.

With regard to **claim 10** Sinclair discloses the further image, which is generated by modifying one or more characteristics of the image shown at column 6 lines 3-7. The size of the image is increased or decreased as the further image is being generated.

With regard to **claim 11** Sinclair discloses generating a further image (as described in claim 9 above) which is carried out by selecting a new image from a predefined set of image (images 20, 21, and 22 are selected in order to generate a further image. See, col. 6 lines 32-45).

With regard to **claim 12** Sinclair discloses a system and a method of claims 22 and 5, respectively, where if the person's input indicates that the person does accurately perceive a characteristic of the image, and then the further image of the "C" is decreased in size so that the further image is more difficult for the person to accurately perceive.

With regard to **claim 13** Sinclair discloses a system and a method of claims 22 and 5, respectively, where if the person's input indicates that the person does not accurately perceive a characteristic of the image, then the further image *is* less difficult for the person to accurately perceive at column 6 lines 11-14 where Sinclair utilizes a larger image until the image is accurately perceived.

With regard to **claim 14** Sinclair discloses generating series of images used to ascertain the visual and neurological perception ability of the user (col. 6 lines 32-45).

With regard to **claim 15** Sinclair discloses the image that has a contrast level, and wherein the modification results in the further image having a different contrast level (Sinclair: column 7 line 47 "changing the contrast of the image.").

With regard to **claim 16** Sinclair discloses the image that has perceivable contours, and wherein the modification results *in* the further image having different contours (Sinclair: column 6 lines 62-65. "utilize images such as intricate letters such as P, Q, R and S." note that the letter inherently have different contour than the letter C.).

With regard to **claim 17** Sinclair discloses the image that has a spatial frequency, and wherein the modification results in the further image having a different spatial frequency at column 7 lines 44-46 and also at column 10 lines 22-25.

With regard to **claim 18** Sinclair discloses the image that has spacing attributes, and wherein the modification results in the further image having different spacing attributes (Sinclair: column 7 lines 44-46 “spacing between the sinusoidal lines is varied.”).

With regard to **claim 19** Sinclair discloses the image that has a certain orientation, and wherein the modification results in the further image having a different orientation (Sinclair: column 10 lines 22-25 “modifying the orientation.”).

With regard to **claim 20** Sinclair discloses the image comprising one or more Gabor patches (Sinclair discloses “C” images or gratings seen in Fig. 3 at element 18. See, col. 7 lines 18-25. Note: it is well known in the art that the grating patterns are commonly referred to a Gabor patches).

With regard to **claim 21** It would have been obvious matter of design choice to modify either the Pellicano or the Sinclair reference by having the image comprising one or more lines, since applicant has not disclosed that having one or more lines solves any stated problem or is for any particular purpose and it appears that having one or more lines is same as having one or more character (as disclosed in Pellicano and Sinclair).

Regarding **claim 22** Sinclair discloses the image comprising a plurality of objects arranged to form a contour as seen in Figure 2 and also at column 6 lines 26-30.

With regard to **claim 23** Pellicano discloses method comprising: a host terminal (host server 30, Fig. 1(a)) sending parameters to a client terminal (sending parameters thru internet 20 to client terminal 10, Fig. 1(a)), receiving the user performance data (client terminal 10 receives the data from the network communication 20, Fig. 1(a)); and analyzing the user performance

data (analyzing the data for a variety of vision acuity tests at col. 4 lines 4-11); the client terminal (client terminal 10, Fig. 1 (a)). Pellicano does not expressly disclose detail of the client terminal. However, Sinclair discloses the client terminal comprising: receiving the parameters (Sinclair: col. 5 lines 66-67 to col. 6 lines 1-3); generating a set of images based upon the parameters (Sinclair: column 5 lines 47-51, the input program generates the series of images including the target as shown in Fig. 1); presenting the set of images on a display screen (display screen/monitor 11/12. Sinclair: See, col. 5 lines 27-29); receiving an input from a user based on the user's perception of the set of images (Sinclair: column 5 lines 66-67 to column 6 lines 1-3); generating a further set of images based at least in part upon the parameters and based at least in part upon the user input ((Sinclair: See, column 6 lines 3-7). As to "generating a further image" based on the input as called for in claim 23, this limitation corresponds to the progressively larger or smaller images generated according to the techniques in Sinclair at column 6 lines 5-17.); generating user performance data based at least in part upon the user input (when user inputs their perception, data is being generated. Sinclair: See, col. 5 lines 47-51); and Pellicano's client terminal sends this user performance data to the host terminal (client terminal 10 sends the data to host server 30 thru network connection 20, Fig. 1(a)). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Pellicano with Sinclair. The motivation for doing so is that including detail information of how the client terminal performs based on user's input would have been obvious from Sinclair. Note, Pellicano (as described above) discloses a variety of vision acuity tests for identifying visual abilities at col. 4 lines 4-67. Pellicano simply goes thru the process without disclosing the detail

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of the client terminal. Therefore, it would have been obvious to combine Pellicano with Sinclair to obtain the invention as specified in claim 23.

With regards to **claim 24** Sinclair discloses the terminal repeating the steps of generating a set of images presenting the set of images, receiving an input from a user, and generating a further set of images until a predefined user goal has be reached (as disclosed in claim 9) repeated a number of times at column 6 lines 9-11. Note: the desired level of improvement in the person's visual perception corresponds to the requirement in Sinclair that the "C" orientations are accurately perceived.

With regard to **claim 25** Pellicano discloses the client terminal (Fig. 1(a)) that sends a request to the host terminal for access to software for identifying visual and neurological abilities and improving visual and neurological performance (client terminal is sending a request to the host terminal via a communication network (Internet) for access to software for identifying vision acuity tests. See, col. 3 lines 13-16 and col. 4 lines 4-8).

With regard to **claim 26** the recited features are the same as those in claim 9, and the arguments in paragraph 11 above as to the relevance of Pellicano, Van Hoff and Sinclair are incorporated herein. Applicants' attention is further invited to a set of images as seen in Figure 2 and the respective portion at column 6 lines 26-30 where elements 20, 21 and 22 are the set of images. Further, Pellicano discloses a calibration data at col. 3 lines 65-67 to col. 4 lines 1-3.

With regard to **claim 27** Pellicano discloses the host terminal generating a further set of parameters based at least in part upon the analysis of the user performance data (host server creating a color change upon user's input at col. 4 lines 32-36).

With regard to **claim 28**, Pellicano (as modified by Van Hoff and Sinclair) discloses all of the claimed subject matter as already discussed above in claim 23 and the arguments are not repeated herein, but are incorporated by reference. Claim 28 distinguishes from claim 23 only in that it recites proving the Internet website. Applicants' attention is further invited to an Internet browser (i.e., Internet website) disclosed in Pellicano at col. 2 lines 67 to col. 3 lines 1-3. Connection is made between the host server 30 and a client terminal 10 after entering the correct website address as seen in Fig. 1 (a) of Pellicano.

Claim 29 recites identical features as claim 10 except claim 29 is a method claim. Thus, arguments similar to that presented above for claim 10 is equally applicable to claim 29.

Claim 30 recites identical features as claim 24 except claim 30 is a method claim. Thus, arguments similar to that presented above for claim 24 is equally applicable to claim 30.

Claim 31 recites identical features as claim 8 except claim 31 is a method claim. Thus, arguments similar to that presented above for claim 8 is equally applicable to claim 31.

With regard to **claim 32**, the recited features are the same as those in claims 1, and the arguments in paragraph 8 above as to the relevance of Pellicano are incorporated herein. Note: web page is disclosed in Pellicano at col. 2 lines 67 to col. 3 lines 1-3.

With regard to **claim 33** Pellicano discloses a portion of data sent over the Internet to be encrypted (i.e., encoded or coded) (the account number sent over the host server from the client terminal in coded. See, col. 3 lines 24-26).

With regard to **claim 34** it is conventional in the art to have the Internet use a certificates for security for protecting the user's private information.

With regard to **claim 35** both Pellicano and Sinclair discloses evaluating the visual and neurological perception ability of the user by evaluating the user's response to a series of images as disclosed throughout the invention (See, Sinclair col. 5 lines 22-25).

Claim 36 recites identical features as claim 20 except claim 36 is a method claim. Thus, arguments similar to that presented above for claim 20 is equally applicable to claim 36.

With regard to **claim 37** Sinclair discloses generating a further image, which is carried out using a configuration that has a different size than the image (Sinclair increases/decreases the size of the "C" upon user's input. See, col. 6 lines 5-10).

With regard to **claim 38** Sinclair discloses generating a further image, which is carried out using a configuration that has a different exposure time than the image (further image has a different exposure time because Sinclair is changing the contrast with the size of the "C" after the user's input. See, col. 7 lines 30-34).

With regard to **claim 39** Sinclair discloses the image comprising a plurality of objects (i.e. the letters "c" and "C") arranged to form a non-collinear pattern (the non-collinear pattern is clearly seen in Fig. 2).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5868683 – techniques for predicting reading deficit based on acoustical measurements. Fig. 1.

USPN 6260022 – modular microprocessor-based diagnostic measurement for psychological conditions.

USPN 6331115 – adaptive training of short term memory and auditory/visual discrimination within a computer game.

USPN 5956121 – telecommunication system for examining eye and an ophthalmic apparatus for the system, Fig. 1.

USPN 6026433 – creating and editing a web site in a client-server environment using customizable web site templates, Figs. 1-2.

USPN 6560605 – presentation of link information as an aid to hypermedia navigation.

USPN 6430567 – Multi-user awareness and collaboration, Fig. 2.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D Patel whose telephone number is 703-306-4182. The examiner can normally be reached on M-F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

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DANIEL MARIAM
PRIMARY EXAMINER

Examiner
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